STATEMENT OF WORK
C-130 ISOCHRONAL (ISO) MAINTENANCE STAND

11 April 2017

1.0 SCOPE

This purchase description covers the requirements for the C-130 Isochronal (ISO) Maintenance Stand relocation project. The Contractor shall provide all personnel, equipment, supplies, facilities, transportation, tools, materials, supervision, and other items and non-personal services necessary to relocate the C-130 ISO maintenance stand from Niagara IAP, NY to Keesler AFB, MS to include the physical movement of the stand assemblies. The stand assemblies shall be disassembled, relocated, reassembled, inspected, and when necessary, repaired or replaced to meet the standards as identified below. Final acceptance of the stand assembly will take place only after all components have been inspected, tested, and a full operability check has been performed to include all electrical, air, lighting, hoisting/jack, and any other applicable subsystems by a Government Representative. This requirement shall include a full (1) year warranty of material and workmanship after final acceptance. **Stand assemblies must be picked up from Niagara IAP, NY no later than 15 June 2017.**

2.0 APPLICABLE DOCUMENTS

2.1 Specifications and standards.

While every effort has been made to ensure the completeness of this list, document users are cautioned that they must meet all specified requirements cited in sections 3 and 4 of this performance description, regardless of the standards being listed in this section.

- AFOSH 91-501 Air Force Consolidated Occupational Safety Standard
- AFOSH STD 48-8 Controlling Exposures to Hazardous Materials
- FED-STD-595B Colors Used in Government Procurement MIL-STD-1472F Human Engineering
- MIL-STD-810F Environmental Engineering Considerations and Laboratory Tests
- MIL-HDBK-808 Finish, Protective and Codes for Finishing Schemes for Ground and Ground Support Equipment
- MIL-HDBK-781A Reliability Test Methods, Plans, and Environments for Engineering Development, Qualification, and Production
- AWS D1.1/D1.2 Structural Welding Code
- NFPA 70 National Electric Code

- TO 35-1-3 Corrosion Prevention, Painting And Marking Of USAF Support Equip (SE)

2.2 Order of Precedence

In the event of a conflict between the text of this document and the references cited herein, the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained. The contractor shall meet all applicable codes, standards, laws and regulations at the revision most current at the time of this contract.

3.0 GENERAL REQUIREMENTS

3.1. General

The C-130 ISO Stand Assembly consists of a multi-stand structure allowing maintenance and inspection access to the wings, fuselage, engines, and tails of the C-130 Aircraft. The entire package allows full access around the aircraft, except the nose area. The ISO stand provides electrical and pneumatic utilities. Stands permit the use of nose, wing and tail jacks, and these stands are adjustable in the vertical direction as well.

The maximum amount of stands shall remain in place during mating operations. All areas on the stand that are positioned next to the aircraft shall be padded. Padded areas (bumpers) shall be a minimum of four (4) inches thick and cover the entire width of the deck sections and shall not allow any stand structure to come in contact with the surface of the aircraft. In addition, bumpers shall be of a contrasting color (yellow) to the deck sections and constructed of a durable, compressible material. Any bumpers found to be broken or defective shall be replaced during final reassembly at no additional cost.

3.2. Chassis/Frame

The chassis/frame of the C-130 ISO Stand is constructed of corrosion resistant materials or treated to provide corrosion protection. The frame shall support, at a minimum, 1,000 pounds working load and each section shall have at least a four wheel design. Any chassis/frame piece not meeting these standards shall be repaired or replaced at no additional cost.

3.3. Adjustable Deck Sections

Adjustable deck sections are a permanent part of the maintenance stand and have a positive locking mechanism to allow for proper aircraft interface. Time required to adjust any deck section from fully-retracted to fully-extended shall be no more than 10 seconds. Each adjustable deck section shall be capable of being operated by no more than two persons without posing a tripping hazard. The force required to extend the adjustable deck section shall not exceed the requirements of MIL-STD-1472. Any adjustable deck sections not meeting these standards shall be repaired or replaced at no additional cost.

3.4. Non-Corrosion Enclosure/Materials

Wherever practical, dissimilar metals shall not be used in direct contact with each other. Where such conditions cannot be avoided, suitable protection against galvanic corrosion shall be provided at no additional cost.

3.5. Mobility

Each individual stand that makes up the ISO stand assembly shall be mobile to allow that section to be independent of other stands. All stands shall have secured locking devices to keep adjacent stands from separating when in use. Unless otherwise stated, all wing, engine, prop and tail stands shall be configured to provide a continuous walking surface with no steps. The time for any sectional stand to be connected or disconnected from other stands and removed shall be no longer than 1 minute with 4 people. The time to position entire stand into place around aircraft shall be no longer than 1 hour with 6 people. Each section shall be capable of being maneuvered by four (4) female (5^{th} percentile) persons. The force required to move each section shall not exceed the requirements of MIL-STD-1472, and associated tables, Paragraph 5.9.11.4.1 (high traction). Any stand not meeting these standards shall be repaired or replaced at no additional cost.

3.6. Welds and Welding

Welds shall be inspected to ensure proper penetration and verified to be free from weld defects including but not limited to, cracks, undercut, and porosity. All welding on the C-130 ISO Stand shall be completed per American Welding Standard (AWS) D1.1 or D1.2. Welding procedures shall be in accordance with AWS D1.1 or D1.2.

3.7. Functional Characteristics

3.7.1. Vertical Actuator: Actuators shall be manually driven and capable of at least two (2) feet of adjustment for all stands. The starting height for the fuselage and tail stands shall be 93 inches. The wing and engine stands shall follow the contour of the wing within 6 inches. Any actuator not meeting these standards shall be repaired or replaced at no additional cost.

3.7.2. Casters: Casters shall be steerable. They also shall be lockable and durable. Casters shall be at least 10" in diameter to withstand operation over inclines, storm drains, grounding points or hangar door tracks without causing damage to the caster or stand. Pneumatic tires are unacceptable. Casters must mobilize stands freely inside the hangar without the use of ramps or pry bars. Casters shall have non-skid tread on them and shall have a safety factor of at least 4. Casters shall utilize sealed lubrication bearings. Any caster not meeting these standards shall be repaired or replaced at no additional cost.

3.7.3. Electrical Power: Electrical power shall be 120v, 1 phase, 60Hz. Electrical components shall be solid state and commercial off the shelf where possible for electrical plugs, connectors, and receptacles. The lighting circuit shall be 277/480v, 3 phase, 60 Hz, and 30 Amps. The service circuit shall be 120/208v, 3 phase, 60 Amps. Electrical outlets shall accompany light fixtures. Wherever possible, electrical and air receptacles shall be located beside each other. Electrical connections shall be available from the trailing edge stands, the fuselage/engine stands and underneath where the main landing gear is located. The electrical system shall comply with NFPA 70, National Electric Code. Separated stands shall not affect the basic electrical configuration. Any part of the electrical power system not meeting these standards

shall be repaired or replaced at no additional cost.

3.7.4. Lighting: Lighting shall be provided on the C-130 ISO Stand for maintenance and inspection operations. Lighting shall be located on the perimeter of the stand and offer the greatest color rendition and illumination possible utilizing the minimal number of fixtures for the application. The lighting shall illuminate the entire engine area (both sides of each engine), the entire underside of the wing trailing edge area, and the main landing gear area. There shall be a control panel for the lights on either side of the airframe and it shall be located on the stand that interfaces with the fuselage underneath the wing. The control panel shall be equipped with 2 receptacles to receive power. One receptacle extends to the front side of the stand and the other extending to the back side of the stand. Separated stands shall not effect basic lighting configuration. Lighting shall not pose a tripping hazard to maintenance personnel. Any piece of lighting not meeting these standards shall be repaired or replaced at no additional cost.

3.7.5. Air System/Connections: Quick disconnect sockets shall be provided to accommodate all male quick disconnects and capable of supplying regulated air pressure up to 150 psi @ 250 CFM. Wherever possible, electrical and air receptacles shall be located beside each other. Air connection shall be available from every stand and underneath where the main landing gear is located. Air shall be available from two entry points one on each side. Separated stands shall not affect the basic air configuration. Any air system part not meeting these standards shall be repaired or replaced at no additional cost.

3.7.6. Fall Protection/Railing: Handrails shall comply with all OSHA/AFOSH regulations. The perimeter of stand shall have no chains. All perimeter railing shall be operated by one person and shall be at least 42 inches. When any stand is removed, all of the adjacent stands shall be able to accommodate railings. The railings shall not have any "play" in them. All perimeter railing shall be able to be removed to allow stairs to interface with stands. All rails that can be removed shall have a positive locking mechanism that does not require a tool to be used to disengage the rail from the stand. Any piece of fall protection or railing not meeting these standards shall be repaired or replaced at no additional cost.

3.7.7. Stairs: Three (3) sets of stairs shall be provided on each side of the aircraft. The stairs shall be OSHA/AFOSH compliant regardless of the height of the stand platform. The stairs shall be able to be located anywhere on the perimeter of the stand. The stairs shall be four (4) feet in width. Stairs shall incorporate an anti- skid (non-slip) surface which is self-cleaning. An additional set of stairs shall be provided with each tail stand. One set of stair stands shall be a two tier design to allow access to the stand platform and the top of wing. The over wing bridge retraction system shall be operable by one person. Any part of stairs or retraction system not meeting these standards shall be repaired or replaced at no additional cost.

3.7.8. Deck Surface: All decking surfaces shall be solid, anti-skid and resistant to jet fuel,

aircraft hydraulic fluid, and cleaning and degreasing solvents. Anti-skid surfaces shall prevent slipping and allow maintainers to kneel, crouch, and lie down without causing minor injuries such as abrasions during aircraft maintenance. OSHA/AFOSH kick-plates shall be provided around perimeter of the stand and can be installed on any stand when the adjacent stand has been removed. Decking shall follow the slope of the aircraft wing without utilizing steps and shall also be continuous. Any deck surface not meeting these standards shall be repaired or replaced at no additional cost.

3.7.9. Jack Access: Jack access shall cover all jack areas. Jack access shall be a 2.5' by 2.5' opening with the center of each jack location. Adjustable decking shall eliminate any open area whether jacks are present or not. The substructure of the stands shall accommodate jacks so that the legs can rotate 360 degrees. Any part of the jack access area not meeting these standards shall be repaired or replaced at no additional cost.

3.7.10. Working Load: Platform fatigue in the form of "oil canning" is unacceptable. Each stand within the C-130 ISO Stand set shall safely hold four (4) times the design operating load. Stand platforms shall be designed for medium duty use and a minimum of 40 lb. per square foot loading criteria. Toolbox areas must meet a Medium duty (50 pounds per square foot) application. Any piece of part of the platforms not meeting these standards shall be repaired or replaced at no additional cost.

3.8. Painted Color

The C-130 ISO Stand paint shall comply with FED-STD-595, semi-gloss gray, color 26173. Chemical Agent Resistant Coating (CARC) shall not be used. The C-130 ISO Stand shall comply with T.O. 35-1-3 (Corrosion Prevention, Painting, and Marking of USAF Support Equipment). Markings shall be one (1) inch high block letters/numbers unless prohibited by available space. In such cases, the markings shall be the largest practical size consistent with good appearance and visibility, but shall not be less than one-half (1/2) inch high. Colors used shall be in accordance with the following table. Any paint and markings not meeting these standards shall be repaired or replaced at no additional cost.

APPLICATION	FED-STD-595 COLOR
Exterior Finish	26173 Semi-gloss Gray
Markings, Informational/Caution	37038 Lusterless Black
Markings, Warning/Danger and Adjustable Deck Sections	31136 Lusterless Red

4.0 PRODUCT CONFORMANCE PROVISIONS

4.1 Responsibility for inspection

The contractor is responsible for the performance of all inspection/test requirements unless otherwise specified to verify compliance with this Statement of Work. The Government reserves the right to perform any of the inspections set forth in the contract, to include this statement of work, where such inspections are deemed necessary to assure supplies and services conform to the contract requirements.

4.2 Responsibility for compliance

All items must meet all requirements and standards of sections 3, 4, and 5 of this Statement of Work. The absence of any inspection requirements in this Statement of Work shall not relieve the contractor of the responsibility of assuring that all products or supplies submitted to the Government for acceptance comply with all requirements of the contract. Sampling in quality conformance does not authorize submission of known defective material, either indicated or actual, nor does it commit the Government to acceptance of defective material.

5.0 DOCUMENTATION

5.1 Installation and Operation

The Contractor shall be required to fully assemble C-130 ISO Stand upon delivery. Final acceptance of the stand assembly will take place only after all components have been inspected, tested, and a full operability check has been performed to include all electrical, air, lighting, hoisting/jack, and any other applicable subsystems by a Government Representative.

5.2 Warranty

This requirement will include a full (1) year warranty of material and workmanship after final acceptance.

6.0 TRAVEL

The Contractor shall arrange and execute any and all travel necessary for the performance of the requirements of this Statement of Work at no additional cost.